

371

CITY & COUNTY OF HONOLULU

ORDINANCE No. 627

RELATING TO PLUMBING

Honolulu Ordinances, etc.

For Reference

Not to be taken from this room



TH6166

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1934

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HONOLULU, T. H.

October 24, 1934

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ORDINANCE NO. 627

**AN ORDINANCE TO AMEND ORDINANCE
490 BY ADDING CHAPTER 15 RELAT-
ING TO THE PLUMBING PROVISIONS
OF THE BUILDING CODE.**

*Be It Ordained by the People of the City and
County of Honolulu,*

Section 1. Ordinance No. 490 is hereby amended by adding thereto Chapter 15 to read as follows:

SECTION 15.100. The Superintendent of Buildings of the City and County of Honolulu, Territory of Hawaii, shall appoint, as per Section 1.210 of the Building Code No. 490, and may remove at pleasure, a suitable person as Plumbing Inspector of said City and County of Honolulu, who shall be a practical plumber with at least five years experience, and who has a certificate as a Journeyman plumber and a resident of the Territory for three years and who shall not be financially interested in any concern carrying on a plumbing business, nor engage in the plumbing business as a Master or Journeyman Plumber in the City and County of Honolulu during the term of his office. The salary of the Plumbing Inspector shall be fixed by the Board of Supervisors. Such Plumbing Inspector shall have all of the powers and shall perform all of the duties hereinafter provided.

The Superintendent of Buildings shall appoint and may remove at pleasure, a suitable person as Assistant Plumbing Inspector as per Section 1.210 of the Building Code, of the City and County of Honolulu. Such Assistant Plumbing Inspector shall possess all the qualifications and be subject to all the restrictions required of the Plumbing Inspector, and act under his orders and assist him in the discharge of his duties.

The salary of the Assistant Plumbing Inspector shall be fixed by the Board of Supervisors.

DUTIES OF THE PLUMBING INSPECTOR

SECTION 15.110. The Plumbing Inspector shall be in attendance at the office of the Department of Buildings, between the hours of 8:30 and 10:00 A. M. and 1:00 to 2 P. M., daily, to receive applications for proposed plumbing and drainage, and to make appointments for the inspection of the work in course of construction.

He shall number and file all permits accepted, and record in the Building Inspector's Office the name of the owner and the Master Plumber and location of work. He shall inspect all plumbing work done in the City and County of Honolulu, and if after proper final inspection of any job of plumbing work the same is found to be properly done and tested as required by this ordinance, he shall issue to the proper person, persons, firm or corporation, a certificate setting forth the fact that the work has been inspected and the same found to have been done according to the requirements of this Ordinance.

The Plumbing Inspector shall have the right and authority to enter any building or go upon any premises where plumbing work is being done at all reasonable hours to ascertain if the provisions of this Ordinance have been or are being complied with. When the roughing-in work is completed and ready for test inspection, the Plumbing Inspector shall be notified by telephone giving number of permit, or in writing on forms furnished by the Plumbing Inspector's Office, which notice shall state the time when such work shall be ready for inspection and the location thereof, and the work shall be left open and convenient for inspection for two (2) working days if necessary, after such notification. The Plumbing Inspector shall inspect the work as soon as possible and not later than two (2) working days after having been notified that such work is ready for inspection. No work shall be considered ready for inspection until all pipes are tested and securely strapped in place as hereinafter specified.

If after waiting two working days after notifying the Plumbing Inspector that inspections are ready and the Inspector fails to make inspections as requested, the applicant may proceed to complete the work without further delay. No plumbing work shall be used until a final inspection has been made by the Plumbing Inspector and a final Certificate of approval issued by him to the plumbing contractor or to the owner of the premises or his agent.

The Plumbing Inspector shall issue to any person, persons, firm or corporation all necessary plumbing blanks.

ADDITIONAL INSPECTIONS

SECTION 15.120. If any additional inspection becomes necessary by reason of any non-compliance with the provisions of this ordinance, or because the work is not ready for inspection at the time the Plumbing Inspector shall have been notified that it would be ready, a charge of one dollar (\$1.00) shall be made for each such additional inspection. All fees for additional inspections shall be paid to the Building Inspector's Department, or duly authorized agents, who shall issue a receipt therefor, and no additional inspection shall be made until said fees are paid.

APPLICATIONS AND ISSUANCE OF PERMITS

SECTION 15.130. After the applications have been properly filed and approved by the Plumbing Inspector, he shall issue the required permit to the person, persons, firm or corporation having a license to do plumbing work as required under this ordinance.

FEES, MAINTENANCE AND UPKEEP

SECTION 15.140. The Inspector of Buildings shall collect all fees provided for by this ordinance, except plumbers license fees and shall deposit the same with the Treasurer of the City and County, or his

deputy, daily as said collections are made. He shall have general charge of the operation, maintenance and upkeep of said department and expenditure of all moneys on account thereof.

BOARD OF EXAMINERS

SECTION 15.150. The Mayor, with the approval of the Board of Supervisors, shall appoint a Board of Plumbing Examiners, to be known as the Board of Plumbing Examiners of the City and County of Honolulu. Said Board shall consist of the Building Inspector who shall be an ex-officio member of said Board and the Plumbing Inspector who shall be an ex-officio member and Secretary of said Board, and two (2) Journeymen and one (1) Master Plumber who shall have at least five years experience in their respective trades. A quorum shall consist of two (2) members and the Secretary of said Board.

Members of said Board shall, before entering upon their duties, take and subscribe an oath of office in the form set forth in Section 1757 of the Revised Laws of Hawaii, 1925, and file the same in the Office of the City and County Clerk.

The Board of Plumbing Examiners shall meet regularly at least once a month, for the transaction of its business; provided, however, that if at any such regular monthly meeting, the business to be transacted proves too great to be accomplished within a period of two hours, such regular meeting may be adjourned to a date not more than one week subsequent to such regular meeting.

SECTION 15.160. Examinations under this section shall be held on the first Monday of each month at 7:30 P. M., or from time to time whenever necessary at the office of the Plumbing Inspector, Honolulu Hale. The compensation for the three duly qualified members shall be five, (\$5.00) dollars per month for each member.

The members of the Board of Plumbing Examiners shall hold office at the pleasure

of the Mayor and the Board of Supervisors. In case of the absence from the Territory or the inability or disability through illness of any member of such Board to perform his duties, the Mayor is hereby given the power to declare the office of such Examiner vacant, and to appoint a new examiner in his place to serve until his successor is appointed and qualified.

AGE REQUIREMENTS

SECTION 15.170. No person shall receive a license as a Journeyman or Master Plumber who has not attained the age of twenty-one years. No person shall be examined unless he shall have had an experience of at least four years as a Journeyman-plumber helper, and is able to furnish satisfactory evidence of such fact. No person shall be examined for Master Plumber until he has a certificate of competency as a Journeyman Plumber for at least one year.

EXAMINATION

SECTION 15.180. It shall be the duty of the Board of Plumbing Examiners to examine all who apply for examination and to test and ascertain the qualifications of each such applicant for Master, or Journeyman Plumber's license.

Such examination for Journeyman Plumbers and Master Plumbers shall consist of tests in practical plumbing, the correction of defective plumbing on plans and tests of applicant's knowledge of the Ordinance of the City and County of Honolulu, the regulations of the Board of Health of the Territory of Hawaii, and the laws of the Territory of Hawaii regulating plumbing. The examination shall be oral, written and by actual work with tools and materials.

The Board of Examiners shall issue to each applicant who satisfactorily passes such examination, a Certificate of Competency as a Journeyman Plumber, or as a Master Plumber, as the case may be, but no certificate shall be issued to any applicant whose

general average upon such examination is less than 75 per cent. Should the applicant fail to pass an examination, he shall not be eligible for another examination for a period of one month thereafter. The Secretary of the Board of Examiners shall notify each applicant in writing of the time and place of examination.

Every application for any examination shall be made on forms furnished by the Department of Buildings and shall give such information as said Board may consider necessary to carry out the intents and purposes of this ordinance.

The said Board may adopt such rules and regulations as may be necessary in their opinion to carry out the intents and purposes of this section.

Any person desiring to take the examination for Journeyman Plumber provided for in this Section, shall make written application to the Plumbing Inspector, which application shall set forth the full name, age and address of the applicant, the length of time spent by the applicant in learning or working at the trade or business of plumbing, and the place where his knowledge or experience was gained. Before being examined the applicant shall pay to the Plumbing Inspector a fee of five dollars (\$5.00) for such examination and if the applicant fails to pass an examination, he shall pay a fee of five dollars, (\$5.00) for each subsequent examination.

The fee for a Master Plumber's examination shall be twenty dollars, (\$20.00).

REGISTRATION

SECTION 15.190. It shall be unlawful for any person or persons, firm or corporation to carry on the business of plumbing or do any plumbing work in the City and County of Honolulu, until he or they shall have first registered at the office of the Plumbing Inspector. No person shall be registered at the office of the Plumbing Inspector who shall not have received from

the Board of Plumbing Examiners and filed with the Plumbing Inspector a certificate of competency as a Journeyman Plumber or as a Master Plumber.

Any person so registered shall be deemed to be a registered plumber within the requirements of this Ordinance, and it shall be the duty of such registered plumber to promptly notify the Plumbing Inspector of any change in his address. The Plumbing Inspector shall issue a registration card, signed by him, to every person so registered, which card shall contain the name and address of the applicant and shall state that the person therein named is duly qualified and a registered plumber.

When two or more persons wish to engage in the Plumbing Business as co-partners, registration shall be made in the name of the co-partnership. Any member of the firm or co-partnership may pass the examination and qualify for the firm or co-partnership, but no plumbing work shall be done by any person who has not received a certificate of Competency as a Journeyman Plumber from the Board of Plumbing Examiners.

Master Plumber registration cards must be displayed in a conspicuous place in their place of business.

Journeyman Plumbers must carry their Registration Cards with them on all plumbing jobs. In case of Lost Registration Cards, duplicates may be obtained from the Plumbing Inspector upon payment of a fee of fifty cents, (\$50).

LICENSE

SECTION 15.200. The Treasurer of the City and County shall issue to any person, firm or corporation who has registered and acquired a certificate of Competency from the Board of Plumbing Examiners, a license to do Plumbing work in the City and County of Honolulu.

No person shall do any plumbing work without first paying the License Fee and

receiving a License, as in this Ordinance provided. The amount of said fee shall be, for Master Plumbers, twenty five dollars (\$25.00) per annum or fraction thereof, and for Journeyman Plumbers, one dollar, (\$1.00) per annum or fraction thereof. Any person who shall work as both Master and Journeyman Plumber shall secure both licenses and pay both fees. Only one apprentice while learning the Plumber's trade may work with and help a regularly qualified and licensed Journeyman Plumber, under his immediate instruction and direction.

All licenses shall expire on the thirtieth day of June of each year. No license shall be issued pursuant to this Ordinance to any person who is not a registered plumber, as defined in this Ordinance. Any such license must be renewed from year to year without any further examination unless the license has been cancelled or revoked.

Every renewal shall be made not to exceed thirty days. (30 days) from the date of expiration of said license and any license which is not so renewed shall become null and void, and before the Master or Journeyman Plumber to whom such certificate was issued can do any construction or work regulated by this ordinance, it shall be necessary for him to take out a new yearly license and pay the same fee as provided for in the fore part of this section.

WHO MAY OBTAIN PERMITS

SECTION 15.210. No permit shall be issued to any person, firm or corporation to do or cause to be done any construction or work regulated by this ordinance, except to a Master Plumber as defined in this ordinance, who has a Certificate of Competency as provided in Section 15.180 of this Ordinance.

SECTION 15.220. Upon the expiration of the yearly license, every Master Plumber carrying on the business of Plumbing shall be required to be again registered and file

a new bond, as provided for in sections 15.190 and 15.250.

REGISTRATION, VIOLATION AND PENALTY

SECTION 15.230. Any licensed Master Plumber who allows the use of his license, directly or indirectly for the purpose of obtaining permits for others, or allows the use of his license by others to install plumbing, shall have his license suspended by the Board of Plumbing Examiners for a period of six months.

MASTER PLUMBERS

SECTION 15.240. Every Master Plumber shall have a permanent place of business within a regularly established business or industrial district before registering as a Master Plumber or transacting or doing any plumbing business. When a registered Master Plumber or the member of a firm who has passed the required examination for a firm or co-partnership retires from a firm or dissolves co-partnership, the firm or co-partnership shall forfeit his or their license and no other license shall be granted said firm or co-partnership until one of the remaining members of the firm or co-partnership shall have passed an examination before the Board of Plumbing Examiners as provided for under Section 15.180.

Every Master Plumber must have a sign or plate at his place of business, Office or Shop with his name or name of firm, marked licensed Plumber. It is a violation of the law, punishable by fine or imprisonment, to open a shop or to display a sign before a certificate of competency has been obtained as Master Plumber.

BOND FOR MASTER PLUMBER

SECTION 15.250. Before or at the time a license is issued to a Master Plumber as provided in this Ordinance, the applicant therefore shall file with the Treasurer of

the City and County of Honolulu, a bond to the City and County of Honolulu with two sureties in the sum of Five Hundred Dollars. (\$500.00). The condition of such bond shall be to indemnify and save harmless the City and County of Honolulu, and the officers and agents thereof, from all claims, demands, suits, actions or proceedings of every name, character or description which may be brought against said City and County of Honolulu, or any officer or agent thereof, for or on account of any injuries to any person or persons, or property received or sustained by any person or persons, firm or corporation, by or in consequence of any act or acts of the person to whom such license is issued, or his agents or servants in or about the work permitted to be done by such license, or by or on account of any accident in connection therewith, or by or on account of any violation of any of the provisions of this ordinance by the person to whom such license is issued or by his agents or servants, and to pay to the City and County of Honolulu any penalty recovered against the person to whom such license is issued or his agents or servants for any violation of the provisions of this ordinance, and any expense which may have been incurred by the City and County of Honolulu by reason of any violation of this Ordinance by such person, or by his agents or servants.

Sureties on such bonds shall severally qualify before the City and County Clerk in the amount of the penal sum specified therein. In lieu of the bond above provided, the bond of a surety company authorized under the laws of the United States to become surety on bonds of public officers and lawfully doing business in the Territory of Hawaii under the Laws of the United States and of the Territory of Hawaii, may be accepted. All bonds shall receive the approval of the Board of Supervisors of the City and County of Honolulu before the issuance of any license.

REVOCATION OF CERTIFICATE

SECTION 15.260. The Board of Plumbing Examiners shall have the authority and power to cancel or revoke any certificate of Registration or Certificate of Competency whenever said Board finds that any such Certificate was obtained by fraud or misrepresentation.

Every application for a permit shall be made on forms furnished by the Department of Buildings for that purpose. Every such application shall provide for the location by street and house number where the proposed work is to be done, and shall provide for the use, occupancy or purpose of the building, structure or premises where the proposed work is to be done, and shall provide for the owner's name and Master Plumber's name where the proposed work is to be done, and shall provide for such other additional information as may be considered necessary.

DEFINITION OF PLUMBING

SECTION 15.270. For the purpose of this ordinance, the word plumbing is defined as follows:

The art or trade of putting into buildings the vents, tanks, pipes, traps, fittings and fixtures for conveying waste, sewage, etc., including the installation, changing or replacing of any fixtures, connected with the drainage or waste system of any building, or the installation, changing, or replacing of any part of the drainage or waste system of any building.

APPLICATION FOR PLUMBING AND HOUSE SEWERS AND FOR CONNECTION TO BE FILLED

SECTION 15.280. It shall be unlawful for any person or persons, partnership or corporation to do any plumbing work of any description in any building or upon any property or to do any house sewer work in the City and County of Honolulu, except in case of repair of leaks in faucets, valves and

water supply pipes, without first having filed with the Plumbing Inspector an application which shall clearly show the number and character of all fixtures, and whether connection is to be made with the sewer or with a cesspool or septic tank.

It shall be unlawful for any person, partnership or corporation to connect or to aid in, or to cause a connection to be made, or to make use of the public sewer system of the City and County of Honolulu without first having filed an application, written in ink, and obtained the written approval of the Plumbing Inspector.

Application shall be signed by the owner or by some one on his behalf thereunto duly authorized, and the applicant shall upon such form answer truthfully without concealment all pertinent questions put to him by authority of this or any other Ordinance of the City and County of Honolulu, or the sanitary code of the Territorial Board of Health, or general orders, governing the use of the sewer system of the City and County of Honolulu.

Before any such permit is issued application therefor shall be made to the Plumbing Inspector as provided in the fore part of this section, and the fees specified in Section 15.300 shall be paid to said Department.

Nothing contained in this ordinance shall be deemed or construed to require a permit for removing a stoppage or repairing a leak or defect in any plumbing, (when no additional material is used).

OLD OR NEW BUILDING INSTALLATION. ALTERATION

SECTION 15.290. The installation and alteration of or change in, the plumbing work or fixtures in any old or new building, or buildings, shall not be done until application shall have been made to the Plumbing Inspector and in accordance with the Plumbing Ordinance of the City and County of Honolulu, and the fee paid for same, a permit is required for any alterations, moving or

addition to any plumbing, as defined in this ordinance, and a fee shall be paid therefore for each kind or class of construction or work to be done, as hereinafter specified in the following section for the various kinds and classes of construction of work.

When a building is moved, the plumbing in the building may remain, if, after having been tested the same is found to be water-tight, and free from all defects. New sewers for old houses shall be deemed new work.

For the purpose of this section, a sanitary plumbing outfit, on which or to which a plumbing fixture may be set or attached, shall be deemed and construed to be a plumbing fixture.

FEE FOR PERMITS

SECTION 15.300. No permits shall be issued to any person or persons, partnership or corporation for doing plumbing work in the City and County of Honolulu until the fees therefore have been paid to the Plumbing Inspector or his duly authorized agents or representatives, according to the following schedule. The fee for the installation of fixtures shall be:

For each fixture	\$.75
For each House sewer connected to sewer	3.00
For each House sewer connected to cesspool	1.00
For each House sewer connected to septic tank	1.00
Plumbing piping without fixtures..	1.00
Floor drains shall be considered fixtures.	

DISPOSAL OF APPLICATIONS

SECTION 15.310. When a permit is issued, the application signed by the person or persons, firm or corporation, together, shall be filed with the Plumbing Inspector and shall thereafter remain in the custody of said Inspector. When it is desirable to make changes in the plumbing work from that shown on the application as filed, the person

or persons, firm or corporation to whom the permit has been issued shall give notice of such changes, and if such changes are found to be in accordance with the provisions of this Ordinance, such changes shall be allowed.

SEWER CONNECTION REQUIRED

SECTION 15.320. In the construction, reconstruction or alteration of any building of any description, in which plumbing fixtures are to be placed all plumbing work shall be connected with the public sewer, where such sewer is accessible, and where there is no sewer accessible, with a suitable and properly constructed cesspool, or septic tank.

All buildings in which the plumbing has been done prior to the passage of this Ordinance, must conform to this Ordinance before being connected to the sewer.

HOUSE SEWER

SECTION 15.330. The term "house sewer" as used in this Ordinance designates that part of the drain between the "clean out" at or near the property lines, or a cesspool, and to within five (5) feet of the building connected or to be connected with the sewer, cesspool or septic tank.

House sewers shall not be less than four (4) inches in diameter, and shall be of cast iron pipe, salt glazed vitrified pipe or machine made cement pipe, and shall be laid to a true grade, at least one (1) foot underground. Changes in directions shall be made by "Y" branches and 1/6, 1/8, or 1/16 bends. No offset fittings shall be allowed. Salt glazed vitrified or machine made concrete pipe will not be allowed under any building. Each length of cast iron pipe on horizontal runs must be supported at each hub by proper supports, and vertical runs when above the cellar floor must be supported at each floor and each must have the approval of the Plumbing Inspector. If salt glazed vitrified or machine made cement pipe is

used in the construction of any sewer, it shall have a fall of at least one quarter of an inch to the foot.

The joints shall be made of mortar, composed of equal parts of Portland or other good standard cement and clean screened sand, and said joints shall be covered with cloth in laying. A disc entirely filling the bore of the house sewer pipe shall be kept in the pipe and drawn forward as each length is laid, or salt glazed vitrified pipe may be jointed by caulking with hemp and running the joint with a hot-poured bituminous base compound.

When salt glazed vitrified pipe, or non-reinforced cement pipe is used in tide or surface water, the same shall be concreted entirely around the pipe to a thickness of at least four inches, (4). When cast iron pipe is used, all joints shall be packed with oakum and run with molten lead, and shall be caulked and shall have a fall of not less than three-sixteenths (3/16) of an inch to the foot. In the construction of any house sewer, no intermediate sections such as the introduction of sections of salt glazed vitrified pipe or machine made cement pipe shall be used between sections of cast iron pipe or of standard cast iron pipe between extra heavy sections or of cast iron pipe between salt glazed vitrified pipe, machine made cement pipe or of wrought iron pipe.

The free flow of air shall not be obstructed in any house sewer when connected with any cesspool sewer, or septic tank.

Wherever in this ordinance machine made cement pipe is mentioned, it shall conform to Serial Designation C.14-24 of the Standard Test Specifications of the American Society for Testing Materials.

HOUSE DRAINS AND EXTRA HEAVY REQUIREMENTS

SECTION 15.340. The term "house drain" is herein used to designate that part of the drain under the first floor of the building or structure and extending five (5)

feet outside of the walls thereof. All house drains shall be of cast iron or galvanized wrought iron pipe not less than four (4) inches in diameter and shall have a fall of not less than 3/16 of an inch to the foot. In buildings or structures of three stories or more in height, the grade of cast iron pipe commercially known as Extra Heavy, or galvanized wrought iron shall be used for the house drain soil waste and vent pipes, and fittings shall be of the same grade.

All house drains shall be securely ironed to walls or laid in trenches of uniform grade or suspended to floor timbers by strong iron hangers made of not less than three-eighths inch, (3/8) round iron galvanized or one (1) by one-eighth (1/8) inch flat iron galvanized hangers placed every five (5) feet apart, or if near the ground by good and substantial masonry piers back of the hub and five (5) feet apart. In no case shall double hubs be allowed and all hubs shall be laid opposite to the fall of the sewer.

The use of galvanized steel or wrought iron pipe for drains under-ground is forbidden. The use of Saddles or Bands shall not be permitted in any house drains, house sewers, soil pipes or vent pipes.

SOIL PIPES

SECTION 15.350. The term "soil pipe" as used in this ordinance shall designate the vertical pipe to which one or more water closets or other fixtures are connected. All soil pipes shall be of cast iron or galvanized wrought iron pipe not less than four (4) inches in diameter, and, if of cast iron, in building of three stories or more in height, all soil pipes and fittings shall be of extra heavy grade.

At least one soil pipe stack shall be continued unobstructed and undiminished in size not less than one (1) foot above the roof of the building. All soil pipes shall be run on as straight a line as possible and shall not terminate within ten (10) feet of any window or opening on the same or higher

elevation of said soil pipe. If galvanized wrought iron pipe is used, all the fittings must be Durham or recessed screwed type, and the pipe reamed to full bore.

In the construction of soil pipes, all cast iron pipes and fittings shall be covered inside and outside with a coating of asphaltum. Changes in direction of soil pipes shall be made by "Y" branches and 1/6, 1/8, or 1/16 bends; and in no case shall double hubs be used except for vent fittings where the fittings are to be inverted. Sanitary "ts" may be used in vertical runs.

Tin pipes and pipes made from sheet metal shall not be used in the construction of soil or waste pipes. No offset fittings shall be allowed in soil or waste pipes.

No (4x2) 1/4 bend, or other heel outlet fittings shall be allowed to act as a waste or vent pipe through the heel opening, except on vertical lines.

All soil stacks shall be provided with floor rests and substantial supports at intervals not exceeding ten feet.

The use of cement of any description to repair splits or breaks in cast iron pipes or fittings shall not be allowed.

Not more than the following number of water closets may be connected on the various sizes of toilet pipes designated below:

20—Water Closets on 4-inch soil or branch pipe;

40—Water Closets on 5-inch soil or branch pipe;

60—Water Closets on 6-inch soil or branch pipe.

No soil pipe shall be larger than the main sewer in the street, and shall be continued up and through the roof not more than six inches in size, and where vertical lines of soil pipes extend to water closet on the third floor the same must extend full size through the roof.

PIPES IN MASONRY WALLS AND CONCRETE FLOOR SLABS

SECTION 15.360. No pipes of any kind shall be installed, placed or maintained in any concrete or masonry wall, but shall be taken care of by recesses, channels, utility corridors or shafts. No pipes shall be installed, placed or maintained in any portion of any column, girder, beam pier or similar structural member, or between any column and the fire-proofing therefor. No recess or channel shall be made in any concrete or masonry wall other than a division or party wall to a depth of more than one-third (1/3) of the thickness of the wall. Single channels shall not exceed twelve (12) inches in width. No pipes shall be imbedded in concrete floor slabs.

WASTE PIPES

SECTION 15.370. The term "waste pipe" is herein used to designate any pipe leading from a fixture to a soil pipe or house drain and receiving the discharge from any fixture. All waste pipes, except as herein provided shall be of cast iron, brass, copper or galvanized wrought iron.

Branch waste pipes may be constructed of lead provided, however, that if lead is used it shall only be as a branch, and shall not exceed three feet in length. The size of waste pipes shall vary according to the fixtures they are to serve, and in no event shall be less than the following:—

1 to 20 Water Closets.....	4 inches
21 to 40 Water Closets.....	5 inches
41 to 60 Water Closets.....	6 inches
1 only Slop Sink (wall outlet).....	2 inches
1 to 12 Slop Sinks.....	3 inches
13 to 24 Slop Sinks.....	4 inches
1 to 4 Floor Drains.....	2 inches
5 to 12 Floor Drains.....	3 inches
1 to 6 Shower Drains.....	2 inches
" to 15 Shower Drains.....	3 inches
1 only Bath Tub.....	1½ inches
2 to 6 Bath Tubs.....	2 inches

1 only Sink.....	1½ inches
2 to 6 Sinks.....	2 inches
7 to 15 Sinks.....	3 inches
1 only Wash Tray.....	1½ inches
2 to 6 Wash Trays.....	2 inches
7 to 15 Wash Trays.....	3 inches
1 only Wall urinal.....	1½ inches
2 to 6 Wall urinals.....	2 inches
1 to 3 Stall urinals.....	2 inches
4 to 9 Stall urinals.....	3 inches
1 Bar Waste.....	1½ inches
2 to 6 Bar Waste.....	2 inches
1 to 3 Basins.....	1½ inches
4 to 9 Basins.....	2 inches
10 to 15 Basins.....	2½ inches
1 12"x12"x12" Dirt Catcher.....	3 inches
1 24"x24"x24" Dirt Catcher.....	4 inches

Drinking Fountains and Dentists' Cuspidors same as Basin. Soda Fountain same as Bar Waste.

All waste pipes from grease traps shall be in size not less than the outlet of same. Waste pipes from refrigerators or other receptacles in which provisions are kept, shall not connect directly with the drain, soil or vent pipe or discharge upon the ground beneath the building, but shall be trapped and the discharge therefrom allowed to drip into an open fixture in daily use, or be conveyed to the ground at least three (3) feet away from the building.

Continuous wastes shall only be used for basins, and wash trays, and shall not exceed eight (8) feet in length nor shall it exceed three (3) fixtures. Continuous wastes shall not be smaller than one and one-half inches in diameter. Where brass or copper pipe and fittings are used for waste they shall be of iron pipe size and recessed.

TRAPS

SECTION 15.380. A "Trap" shall mean any approved P-shape, S-shape, U-shape, or similar shaped, equipment or appliance for sealing a plumbing fixture or outlet to a soil or waste pipe to prevent the escape of sewer gas through any plumbing fixture or outlet.

All fixtures shall be separately and independently trapped as near the opening thereof as is practicable. All traps shall have a water seal of not less than two (2) inches in depth and shall be set true to water seal.

The vent pipe serving a trap shall not be placed at a greater distance than two (2) feet six (6) inches from the trap it serves. No grease trap shall in any case be placed under a building or structure. Grease traps shall be used only for restaurants, hotels, tenements, and boarding houses. All grease traps shall be of ample capacity to separate 95% of the grease from the flowing waste, and vented by not less than two (2) inch pipe, and shall be constructed of cast iron or reinforced concrete, subject to the approval of the Plumbing Inspector. No bell trap shall be used in any case.

Non-syphon traps shall be used only where the Plumbing Inspector finds that it is impracticable to use any other. When non-syphon traps are used the waste of traps shall not be less than 1½" in diameter.

All traps in the ground or in concrete shall be of cast brass or cast iron coated with asphaltum.

All traps with any mechanical device forming a seal are strictly prohibited.

The sizes of traps must not be less than those given in the following table:—

Traps for water closets. .4 inches in diameter

Traps for slop sinks.2 inches in diameter

Traps for kitchen sinks

1½ inches in diameter

Traps serving wash

trays with continuous

waste and more than

three compartments. .2 inches in diameter

Traps for wash trays. .1½ inches in diameter

Traps for wall urinals. 1½ inches in diameter

Traps for stall urinals. .2 inches in diameter

Traps for floor drains. .2 inches in diameter

Traps for shower bath. 2 inches in diameter

Traps for bath tub. .1½ inches in diameter

Traps for wash basin. .1¼ inches in diameter

Traps for wash basin
with continuous
waste1½ inches in diameter

Traps for drinking
fountain1¼ inches in diameter

The material for traps shall be either vitreous-china, lead, brass, cast iron or malleable iron. No slip joint connection shall be installed on the sewer side of trap.

All brass traps and tubing shall be of good quality brass and not less in thickness equal than to No. 20 Brown and Sharp gauge. Double trapping of fixture is forbidden.

VENT PIPE

SECTION 15.390. "Vent Pipe" shall mean any pipe or system of piping, including fittings, for the purpose of supplying air to any plumbing fixture trap or sanitary plumbing piping to prevent trap syphonage, back pressure, and sewer gas.

Whenever a new building is erected higher than an adjacent existing building, the owner of the new building shall not locate windows or openings within ten feet of an existing vent stack on the lower building, unless the owner of such new building shall defray the expenses or shall himself make alterations necessary to conform with this ordinance.

SECTION 15.400. In every building or structure where there is a water closet, there shall be at least one four (4) inch vent pipe, running from the house drain unobstructed and undiminished in size to a point not less than one (1) foot above the roof of the building or structure, or fire wall, or if such building or structure has a fire wall within ten (10) feet of said vent, then not less than one (1) foot above said fire wall. The terminal of all vents shall be at least ten (10) feet from any window or other ventilation on the same or higher elevation of said vent pipe. Vent pipes shall not terminate in any chimney or flue.

No lead pipe shall be used for any vent

except as a branch to connect with an iron pipe and then only for a distance not to exceed two (2) feet. Vent pipes may converge into one pipe at any point not less than three (3) feet six (6) inches above the floor line on which they serve of the building or structure. All vent pipes shall be extended above the roof of the building or structure in the same manner as the four (4) inch vent pipe herein referred to.

All vent branches must be taken from the top of waste and in no case shall the vent be taken from the crown of the trap.

The size of vent pipes for each fixture shall not be less than the following:—

1 Basin	1¼ inches
1 Sink	1½ inches
1 Bath	1½ inches
1 Wash Tray	1½ inches
1 Urinal	1½ inches
1 Bar Sink	1½ inches
1 Bidet	1½ inches
1 Sitz Bath	1½ inches
1 Water Closet	2 inches
1 Slop Sink	2 inches
1 Dirt Catcher	2 inches
Floor drains with 3" or 4" trap..	2 inches
Floor drains with 2" trap	1½ inches

Floor drains with cast brass or cast iron pot traps need not be vented provided the trap is less than twelve (12) feet from main line and said line continued to roof or vent stack.

All vent pipes shall have a grade towards the trap and shall not be carried more than twenty (20) feet out of a vertical line to enter another pipe without increasing one size larger.

When two water closets are on a four (4) inch vent stack such stack may vent both closets, providing it is, within thirty (30) inches of the traps of such closets on the line of the pipe.

Whenever fixtures are grouped the vents therefor shall not be less than the following:

- 1 to 12 Water closets on one four inch vent.
- 13 to 25 Water Closets on one five inch vent.

26 to 60 Water Closets on one six inch vent.

And in no case shall it be larger than six inches in any one building.

- 1—1¼" vent on one 1¼" pipe;
- 2—1½" vent on one 1½" vent;
- 3—1¼" vent on one 1½" pipe;
- 6—1¼", or 5—1½", or 3—2" vents on one 2½" pipe;
- 10—1¼", or 7—1½", or 4—2" vents on one 2½" pipe;
- 13—1¼", or 10—1½", or 6—2" vents on one 3" pipe;
- 18—1¼", or 13—1½", or 8—2" vents on one 3½" pipe;
- 24—1¼", or 16—1½", or 12—2" vents on one 4" pipe.

Two water closets when connected together shall be connected with not less than one 3-inch vent pipe.

Stacks or vents must be flashed and counter flashed with not less than three pounds sheet lead or 16 oz. copper and must extend not less than six inches from the pipe and the joint made water-tight.

Buildings of over five stories in height shall be provided with a relief by-pass or yoke vents at each fifth floor intervals, and shall be equal in size to that of the main vent.

A wet vent is a pipe so connected to a trap that during the discharge of a fixture the vent pipe becomes filled or partially filled with water. The plumbing fixtures should be so arranged as to avoid this condition. Where the use of wet vents is contemplated, permission must be first obtained from the Plumbing Inspector.

JOINTS OR CONNECTIONS

SECTION 15.410. All joints of cast iron pipes shall be packed with picked oakum and run with molten lead and shall be well caulked. Joints and connections in lead pipe shall be made with wiped joints. Connections of lead with cast iron pipe shall be made with brass ferrule caulked in and

wiped joints. Connections of lead and wrought iron pipe shall be made with brass soldering nipples and wiped joints screwed into fittings.

Connections of brass tubing and wrought iron pipe shall be made with a brass screw collar.

Wiped joints shall have the exposed surface of the solder on each side of the joint at least $\frac{3}{4}$ of an inch, and a minimum thickness at the thickest part of the joint of $\frac{3}{8}$ of an inch.

Water closets installed on wooden floors must be connected with brass ferrules, wiped to lead stubs and with floor flanges. Water closets installed on cement floors must be connected with cast iron, galvanized wrought iron or brass pipe and floor flanges caulked or screwed on.

WATER CLOSETS AND VENTILATION OF TOILET ROOMS

SECTION 15.420. Every water closet shall be adequately flushed by means of a tank, or an approved Flushometer valve. No Flushometer valve shall be installed with a side or rear spud located below the rim of the bowl.

Every apartment or room containing a water closet or urinal shall be properly ventilated by means of a window opening directly into the open air, or a metal duct of not less than 26-gauge, and said duct to contain not less than 144-square inches in area for each toilet room, provided, however, that an interior room containing a water closet or urinal may be constructed if such room be ventilated by a positive mechanical system in such a manner as to completely change the atmosphere of such room at least six times each hour all to the satisfaction of the Plumbing Inspector.

Shut-off valves shall be placed on all supply pipes to water closet tanks, between the tank and the floor or wall.

The use of Pan, Hopper or Plunger closets is prohibited.

In all buildings occupied as store, dwelling, lodging or boarding house, hotels, offices, workshop, public garages, laundries, or store houses, there must be at least one (1) water closet in each building. There must be sufficient water closets so that there will never be more than ten (10) persons to each water closet. In places of public assembly, school buildings, canneries, and large factories the number of toilets and the most available location are to be determined by the Building Inspector, Board of Health and the Plumbing Inspector.

Where water closets are located in buildings where food is manufactured or sold, they shall be separated by an ante-room or hallway having direct outside ventilation.

The use of water closet bowls with side inlets or of the valve-in-bowl type is prohibited.

Separate water closets and toilet rooms must be provided for each sex, in buildings used as workshops, office buildings, factories, hotel, lodging or trading houses, laundries, and all places of public assembly shall be clearly marked, MEN or WOMEN, BOYS or GIRLS.

In lodging houses, stores, hotels, tenement houses, factories, or offices there must be one (1) water closet on each floor, and where there are more than ten (10) persons occupying any floor there must be an additional water closet on that floor for every ten additional persons or fraction thereof. All toilet bowls must be of vitreous china or enameled iron.

Range closets are strictly prohibited, provided, however, that an exception may be made, by special permission of the Board of Health in the case of hospitals for insane persons.

Toilets shall be separate in all cases. Each residence or apartment shall be provided with at least one water closet, one sink, and one bath tub or shower bath.

All water closets, earthen or iron, having traps above the floor, using lead connections, shall be fastened to the floor and made per-

fectly tight with red lead putty connections or by such other method as may be approved by the Plumbing Inspector, and when iron connections to water closet traps are used, they shall be cast or galvanized wrought iron pipe with cast brass flanges not less than three-sixteenths, (3/16) of an inch thick screwed on, or iron flanges caulked on. Rubber gaskets shall not be used.

PLUMBING FIXTURES

SECTION 15.430. Every plumbing fixture shall be of enameled cast iron vitreous glazed earthenware or china, except as hereinafter provided.

Urinals shall be approved tile, or similar non-absorbent approved materials. Laundry trays shall be of an approved cement, tile or similar non-absorbent materials. All plumbing fixtures and pipes must be secured to masonry walls with expansion bolts or other approved methods. No wooden plugs will be allowed.

URINALS

SECTION 15.440. All urinals or groups of urinals shall be supplied with water. The floor and sides around all wall hanging urinals shall be covered with non-corrosive and non-absorbing materials. A floor drain shall be installed in the floor under or near the fixture. All stall urinals shall be installed so that the front portion of floor directly in front of same shall have a fall to the fixture.

SAFE WASTES

SECTION 15.450. No safe wastes shall be used in conjunction with urinals. Safe wastes from any fixture shall not be connected directly or indirectly with any sewer, house drain, soil or waste pipe.

OIL SEPARATORS

SECTION 15.460. When the liquid wastes from any structure consist wholly or in part

of volatile, inflammable oil, an oil separator is required. The fixtures receiving such wastes shall be connected to an independent drainage system, discharging into the separator.

Every oil separator shall have an individual three (3) inch vent extending from the top of the separator to the outer air at a point at least twelve (12) feet above the street level.

The discharge from the oil separator shall be independently connected to the sewer.

The horizontal drain and one riser shall be at least three inches, (3) in diameter and risers shall be carried full size through the roof. Oil separators must be approved by the Plumbing Inspector as to type and size and shall be so arranged that when oil capacity is reached, it will automatically close.

WOODEN FRAME-WORK FOR SINKS, TRAYS, AND BATHS, PROHIBITED—

SECTION 15.470. Sinks, trays, and bath tubs, the frame of which is wooden, and which said frame is lined with sheet metal, are not allowed.

Photograph galleries, chemical establishments or other establishments where acid wastes are used, sinks may be built of 2" wood or lined with sheet lead, as directed by the Plumbing Inspector. All bar sink drain boards must be lined and fluted with tinned copper, monel or stainless steel.

All fixtures must be open to the free circulation of air.

ABUTTING SINK AND TRAY

SECTION 15.480. When a sink and a wash tray abut one another, and they are practically one fixture, and they are in the same room, then they or it may be served by one trap.

CLEANOUTS

SECTION 15.490. Every horizontal soil or waste pipe or piping for all fixtures shall

be provided with a cleanout, and every other horizontal pipe or run of piping, which is more than fifteen (15) feet in length, measured in a straight line shall be provided with a cleanout at the upper terminal of the horizontal pipe, and every such run of piping, which is more than fifty, (50) feet or fraction thereof, in the length of such piping.

Brass cleanout connections located in accessible places shall be put in all house drains at the foot of each vertical riser and at every change of direction of the drain.

A cleanout shall not be required on any concealed or completely enclosed pipe or piping which is above the first floor of the building but all changes in direction shall be made by easy bends.

Every cleanout shall be so installed that there is a clearance of not less than eighteen (18) inches in front of the cleanout, and so that such cleanout shall be readily accessible; every cleanout under any portion of a building, which is within eighteen (18) inches of the ground, shall be extended up to or above the finished floor level directly above the place where the cleanout is required, or the cleanout shall be extended outside the building. Brass screw caps for cleanouts must be extra heavy, not less than three-sixteenths (3/16) of an inch thick.

The screw cap must have a solid square or hexagonal nut not less than 3/4 inch high, with a cast diameter of one inch, or adequate inverted counter-sunk socket. The body of the brass cleanout ferrule must be at least three-sixteenths (3/16) of an inch in thickness. The top of the ferrule of the cleanout shall be tool faced to a flawless smooth surface so as to insure a tight joint.

Cleanouts with cast iron bodies are not allowed.

Cast iron fittings with integral brass screw caps are not allowed. A "Cleanout" for house and side sewer shall be installed in each sewer line between the "house" and side sewer and brought up level with the ground or sidewalk.

Cleanouts for recessed and other threaded fittings shall be brass plugs.

All public lavatory rooms with concrete, tile, or other impervious floors must be provided with a floor drain, and at least one 3/4 hose bibb.

DIRT CATCHERS

SECTION 15.500. Every dirt catcher as defined in this ordinance shall be constructed of cast iron or of reinforced concrete provided, with a cleanout and vented.

Every dirt catcher constructed of reinforced concrete shall be at least four (4) inches in thickness for the bottom and walls thereof and shall have a smooth trowelled finish on inside thereof, and as directed by the Plumbing Inspector.

Every dirt catcher shall be trapped so as to provide a water seal of at least four (4) inches. No dirt catcher shall be installed for any purpose other than a public laundry, cannery, slaughter house, meat packing establishment, soap factory, poi factory, bottling works, dairy, milk or cream establishment, boiler room, garage, automobile cleaning or washing or greasing or polishing or filling establishment, or other similar building, works, establishment, or place, and all such establishments or places shall be provided with floor of asphalt, cement mortar, masonry or concrete and shall be connected to the public sewer where such sewer is accessible and where there is no sewer accessible with a suitable and properly constructed cesspool or septic tank.

Every dirt catcher shall be not less than twelve by twelve by twelve (12"x12"x12") inches in size and not more than twenty-four by twenty-four by twenty-four, (24"x24"x24") inches in size and have removable gratings. Every cleanout for a dirt catcher shall be outside of same and made accessible.

SHOWER ROOMS

SECTION 15.510. All shower rooms must have the floors lined with tile, cement, lead or non-corrosive material, and the walls lined to a height of not less than six feet six inches with tile, galvanized iron, or zinc, and made water-tight. Where floors are constructed of concrete for showers above the ground floor, there shall be installed a lining of 4-lb. sheet lead, or 16-oz. soft copper, all corners and waste connections soldered and made perfectly tight, and the concrete placed in position slowly and cautiously to prevent perforation of metal.

TESTS

SECTION 15.520. All house sewer house drain, soil, waste and vent pipes, inside and outside of the building, before being covered, shall have all openings stopped and be filled with water to the top of the highest vent pipe, or shall be subjected to a water pressure equivalent to the pressure when any such piping is filled with water to the highest vent, but need not exceed twenty pounds (20) in any case. The entire system must be watertight. **This test must be made in the presence of the Plumbing Inspector and the Journeyman or Master Plumber doing the work.**

No house sewer, house drain, soil, waste or vent pipe shall be covered or concealed in any way until it has been examined and approved by the Plumbing Inspector. On all new construction work the floors shall not be laid until the roughing-in plumbing is inspected. Provided, however, that any portion of any soil, waste or vent pipe may be tested with the hereinbefore mentioned water test, at the opinion of the Plumbing Inspector before the complete installation of such pipes, and if such portion of such pipe is approved, they may be concealed, covered and enclosed. After all fixtures are connected and traps filled with water there shall be a final inspection made by the Plumbing

Inspector. In no case shall the Plumbing Inspector accept or approve of any job of Plumbing work until the same has been made perfectly tight and to conform with this ordinance.

EXHAUST, BLOW-OFF AND DRIP PIPES

SECTION 15.530. No steam exhaust, blow-off or drip pipe shall be connected to the public sewer except upon the written approval of the Plumbing Inspector.

ACID SYSTEMS

SECTION 15.540. The discharge into the regular plumbing system of acid or liquids of any kind which may be injurious to it is forbidden. Such acids or liquids shall be discharged through an independent system directly to the sewer. Piping for both drainage and vents shall be of resisting material approved by the Plumbing Inspector.

DISCHARGE OF SUMP DUMPS, AND HYDRAULIC MACHINES

SECTION 15.550. Discharge of sewage from sumps by means of pumps, shall be carried by cast iron, brass or wrought iron pipe, independently of the house drain and connect to house sewer using a check valve to prevent sewage from backing into house drains, all to the satisfaction of the Plumbing Inspector.

Wastes from hydraulic meters, hydraulic elevators, or other machinery discharging large quantities of water, shall be detained in a catch basin or receiving tank of sufficient size, and so connected as to prevent the discharge of the wastes under pressure.

RAIN, STORM OR SURFACE WATER

SECTION 15.560. It shall be unlawful for any person or persons, partnership or corporation to allow rain, storm or surface water to enter directly or indirectly into a house, side or main sewer of the sewer system of the City and County of Honolulu.

SWIMMING POOLS

SECTION 15.570. All swimming pools shall discharge first into a properly trapped and vented open receptacle or fixture. Said fixture to be connected to sewer, storm drain, or stream as directed by Board of Health.

The supply pipe shall discharge into the pool above the rim thereof. Adequate shower bath and toilet accommodations conveniently located for the use of the bathers, shall be provided for all pools.

REMOVAL OF BUILDINGS, STRUCTURES OR FIXTURES CONNECTED TO THE SEWER SYSTEM

SECTION 15.580. It shall be unlawful for any person or persons, partnership or corporation to demolish or remove any building or structure, or fixture connected directly or indirectly with the public sewer system without first notifying the Plumbing Inspector of such intention to demolish or remove said building or structure or to disconnect said fixture so connected.

It shall be unlawful for any property owner or his agent or any person to allow any opening in the sewer line caused by the removal of any building or structure or the disconnecting of fixture to remain unsealed in such a manner as to allow rain, surface or storm water to enter the public sewer system of the City and County of Honolulu.

BUILDING MOVED, RAISED, ETC.

SECTION 15.590. When a building is moved, raised, or when an addition or an alteration is made to and in a building where new fixtures are to be put in the addition and old fixtures are to be altered and reset in the old portion of the building then both the new fixtures put in and the old plumbing in the building must be placed in a sanitary condition and comply with these rules and requirements.

CONDEMNATION

SECTION 15.600. When a building has been inspected and the plumbing work condemned by the Plumbing Inspector as being in an insanitary condition, then he shall give a written notice to that effect, informing the agent or owner of said building to repair the defective plumbing therein so as to place the building in a sanitary condition, conforming to this ordinance.

FIXTURES

SECTION 15.610. Whenever any plumbing fixture whose trap is not vented, is removed and replaced with a different plumbing fixture, the trap thereof shall be vented as required by this ordinance.

No open end of any waste pipe or water closet shall be placed less than two feet above high tide, as established by the datum used in government work. No woodwork of any description shall be placed around any fixture, except for capping or frame.

EXPOSED PLUMBING

SECTION 15.620. All pipes and fixtures shall be left exposed to view as much as possible.

CESS-POOL AND SEPTIC TANK CONSTRUCTION

SECTION 15.630. No cesspool shall be constructed nearer than five feet to any boundary line of the lot on which it is located or any closer than ten feet to any building used as a dwelling, or within one (1) foot of the surface of the ground. In case such distance cannot be obtained from the Lot line, building or structure, such cesspool shall be located where directed by the Board of Health. Where septic tanks are contemplated, permission must be obtained from the Board of Health for construction as to type, material, and size. Wooden covers on cesspools shall not be allowed. They shall be constructed of reinforced con-

crete or properly arched stone masonry and shall have a manhole not less than twelve (12") or more than eighteen (18") inches in diameter. The dimensions as to size and depth shall be determined by the Board of Health.

DEFECTIVE WORK

SECTION 15.640. If upon inspection, it shall appear that the work already done or the material used does not in all respects conform to the provisions of this ordinance, the Plumbing Inspector shall notify the person doing the work, and also the person holding the permit, that said work and materials do not conform to this ordinance and shall by such notice specify such changes in workmanship or materials as will make the same conform in all respects to the provisions of this ordinance, and all other work upon the plumbing of any such premises shall be immediately stopped until such notice and the provisions of this ordinance shall have been fully complied with.

If any registered Plumber shall be twice convicted of violating this ordinance by a refusal to comply therewith, after being notified of defective work as in this section provided, he shall upon a third conviction, forfeit his plumbing license for a period of one year.

DANGERS OF INSANITARY CONSTRUCTION

SECTION 15.650. Whenever it comes to the attention of the Department of Buildings that any construction or work regulated by this ordinance is dangerous, unsafe, insanitary or a menace to life, health or property, or is in violation of this ordinance in the judgment to said department, the said department may order any person, firm or corporation using or maintaining any such condition, or responsible for the use or maintenance thereof, to discontinue the use or maintenance thereof, or to repair, alter, change, remove or demolish the same as said

department may consider necessary for the proper protection of life, health or property.

WATER SUPPLY PIPES AND FITTINGS

SECTION 15.660. All water supply pipes for a plumbing system shall be galvanized wrought iron or steel, brass, copper or cast iron, with brass, copper or galvanized cast iron or galvanized malleable iron fittings.

No pipe or fittings that have been used for other purposes shall be used for distributing water.

RELIEF VALVES

SECTION 15.670. Wherever a check valve or pressure reducing valve is installed on the cold water supply line between the street main and the hot water storage tank and/or heater there shall be installed on the hot water distributing system a suitable pressure relief valve and suitable means shall be taken on the hot water system to prevent the heating and storage of hot water heated to a higher temperature than boiling point at atmospheric pressure, (212°F.).

All oil, gas, and electrical waterheaters shall be provided with an automatic relief valve.

WATER SERVICE

SECTION 15.680. The water pipe of any building shall be of sufficient size to permit a continuous ample flow of water on all floors at a given time.

WATER SUPPLY TO FIXTURES

SECTION 15.690. A potable water supply distributing system shall not be connected to or with any water-closet tank, flush valve, combination or other faucet, or any other plumbing fixture or receptacle for waste or surplus water, which is connected directly or indirectly with any sewer, soil or waste of a plumbing system except (1) by discharging over and not less than 1/4 inch above the level at which the fixture

would overflow on the floor (this means, in the case of lavatories and similar fixtures, $\frac{3}{4}$ " if the rim or bead is not over $\frac{1}{2}$ " unless the supply pipe thereto be provided with a complete air break of the full area of the supply pipe and located at least 6 inches above the highest water containing part of the fixture, (2) provided that in lieu of a full area air inlet there may be a combination of check and air inlet so disposed and arranged in location and size that the air inlet shall be sufficient to supply full relief for any leakage that might occur past a defectively sealed check should the washer or other means of sealing be completely destroyed.

No plumbing fixture, device, or construction shall be installed which will provide a cross connection between a distributing system of water for drinking and domestic purposes and a drainage system, soil, or waste pipe so as to permit or make possible the back flow of sewage or waste into the water supply system.

ANTI-SIPHON DEVICES

SECTION 15.700. Wherever the supply to a fixture is introduced into the fixture below the overflow level the supply shall be provided with an approved air-break vacuum device which will prevent the siphoning of water from the fixture into the supply piping and located, together with the supply, at least 6 inches above the overflow line of the fixture, so as to prevent drainage by gravity.

Water supply piping for plumbing fixtures, water supply tanks and swimming pools shall be installed only by registered licensed plumbers.

PENALTY

SECTION 15.710. Any person, firm or corporation violating or failing to comply with any of the provisions of the Plumbing Code as hereinbefore defined, shall be punished by a fine not to exceed One Thousand

Dollars, (\$1,000.00) or by imprisonment not exceeding six (6) months, or by both such fine and imprisonment.

The continuance of any such violation after conviction shall be deemed a new offense for each day of such continuance.

SECTION 2.

This ordinance shall take effect 10 days after approval.

A. D. 1934.

Introduced by
LOUIS S. CAIN,
Supervisor.

Date of Introduction:

July 24, 1934.

Honolulu, T. H.

Approved this 12th day of October, A. D. 1934.

GEO. F. WRIGHT,
Mayor, City and County of Honolulu, T. H.
(Adv. October 18, 1934)

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